

# ***Collaborative Learning and peer review through a wiki in Second Language Acquisition***

***Janvier Nkurunziza, June 2012***

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## ***Literature review***

Learning in collaboration, situation where people learn or try to learn together, has been the focus of much attention over the recent past (Laurillard, 2012). Pair work and group work in the second language classroom is built on strong theoretical and pedagogical backgrounds (Storch, 2005). In theory, pair work and group work is supported by the communicative approach to language learning. Additionally, the pedagogical base of collaborative learning has also been valued and is rooted in Dewey and Vygotsky's social interaction theory (Liou & Lee, 2011; Laurillard, 2012). The theory claims that, for knowledge to be constructed, the individual needs to interact with others in a pair and/or in a group, or in the society. The theory suggests that learning by discussion is important because, in exchanging and discussing ideas, learners develop their own ideas and the less experienced benefits from discussing with the more experienced. Hence, from a socio-constructivist point of view, Storch (2005) advises that learners should be encouraged to take part in activities which develop interaction and construction of knowledge.

## **Social constructivism and social development theory**

Educational theorists have emphasized the role a language can play in social interaction and language development. According to Vygotsky's social constructivism approach, it is important to learn through discussion because when an individual articulates an idea, they contribute to the meaning of the idea (Lund 2008; Laurillard 2012). In the language classroom, a learner discusses with the teacher and other learners about language so that they develop ideas. Another reason why discussion is important is that the less experienced learners are able to move to the 'zone of proximal development' (ZPD). The ZPD is *'the distance between the actual development level as determined by the independent problem solving and the level of potential development as determined through problem solving under guidance or in collaboration with more intelligent peers'* (Vygotsky, 1978:85)

Another theory that supports language learning is the social development theory which views human development and learning as a social process (Vygotsky, 1978). Storch (ibid.) adds that, a novice's cognitive development increases in social interaction with a more confident person. The latter stretches the former beyond their current development level towards the potential development level.

As far as educational technologies go, researchers claim that they can be used to scaffold learners (Lund, 2008 and Wilber, 2010). Lund (2008) argues that a wiki, which is a collective activity by nature and can be examined from a sociocultural perspective, has the potential to advance and realise a collective ZPD. A wiki is an excellent example of social and collaborative learning (Rice & Nash, 2010).

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## **Collaborative learning**

Pair work and group work in the Second Language classroom is built on solid theory and pedagogy (Storch, 2005). The approach is theoretically supported by the social constructivism view of learning which is outlined above. Vygotsky argues that human development is a social and collaborative activity (ibid.)

According to Laurillard (2012), collaboration requires group consensus on the production of output which, in the case of this assignment, is a vocabulary building project.

To achieve the output, the learners need to have a common agreement that demands negotiations, explanations, argumentation, etc. In so doing, the group is required to reflect on each other's ideas so they can make comment or expand the ideas in order to develop them.

In learning through discussion, learners articulate their ideas which can be valuable to each other. Learners ask each other to elaborate or defend their ideas until a better understanding is reached.

In collaborative learning, the focus is on the social and cultural construction of meaning by the group so they can achieve the shared outcome. The group has a shared goal which motivates them. Each participant can learn from others (what they say, how they say it or how they address the topic). They are also motivated by practicing with each other. Each individual group member contributes to the group goal. Laurillard (ibid.) advocates that the group members are valuable to each other and that they are required to contribute to the group objective through a collaborative process.

As far as the process of collaborative learning goes, during the contribution stage, Laurillard (ibid.) goes on to say that, firstly, each learner constructs an idea, explains or describes it and makes it available to other group members for them to challenge or modify it, and the idea originator has to defend or develop it. Then, each group member reciprocates the demands of the other members. Finally, they construct new knowledge together.

## **Pedagogical value of collaborative learning**

The pedagogical value of collaborative learning has been established by many researchers (Storch, 2005; Rice & Nash, 2010; Wilber 2010; and Laurillard 2012). For example, Laurillard (2012) argues the case for the value of collaborative from a pedagogical perspective. She maintains that, cognitively, collaboration entails the representations that individuals have of each other's thoughts. To construct something together, members make a cognitive effort to have a shared meaning which explains why we learn when collaborate. Wilber (2010) states that new technologies like blogs, wikis, etc allow learners to take their writing to the next level (online). They help learners experience real-life publication through websites (blogs and wikis for instance) that they can review online. Learners can create

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multimodal texts in authentic ways and wikis can be embedded in teaching and learning to meet learners' needs at various levels. In Moodle, sharing work allows students to learn by emulation, collaboration and interaction (Rice & Nash, 2010). Also, computers allow peer editing, easier and faster than traditional writing. Integrating technology in writing motivates learners and allows them to create multimodal texts (Wilber, *ibid.*).

Peer reviews can work as a valuable form of collaboration (Storch, 2005; Laurillard, 2012). In peer review, each learner produces an output (a draft paper in the case of writing) and shares it with others in the group for them to make comments. The motivation lies in the fact of constructing and sharing an output for others to react to it. Research studies have suggested peer review benefits, for example, the development of analytical and critical reading and writing skills. In addition, pairs or groups get involved in solving problems collectively that one individual wouldn't solve for example.

## **Classroom implications of collaborative learning**

Researchers claim that autonomous environments may enhance collaboration and affords greater opportunities for practice. The teacher plays many roles (West & West, 2009; Laurillard 2012). West & West (2009) argue that teachers can take some simple steps to get prepared for their role of designing and managing a wiki. They advise that teachers should familiarise themselves with fundamental skills that students need in order to take part in a wiki project: cognitive skills such as webs skills (research for example) and writing skills like editing. However, Kessler (2009) argues that, once the collaboration is underway, the teacher doesn't need to play a strong presence role.

West & West (2009) add that writing and editing skills are the key skills that every wiki project is built on. As in any writing project, learners need to be able to use clear and concise language in order to communicate effectively. They also make it clear that, 'writing can make a wiki project more of a challenge for ESL students, or students with writing deficiencies, and students with reading or learning disabilities' (West & West, 2009:27).

## **The teacher's role in collaborative learning**

In such situations, the teacher's role is to intervene and assist learners (scaffolding) in the whole process (Storch 2005), while keeping the shared goal in mind. The teacher has also to provide formative feedback, though the influence on collaboration is limited (Laurillard, 2012). Citing a study which focussed on the teacher's role, Laurillard (2012) summarises five principles which support collaborative learning and the teacher and reviews the teacher's role.

1. Designing the lesson, planning it, setting and organising the task,
2. Making collaboration happen: assigning learners small groups or pairs in order to learn from one another,
3. Encouraging learners by providing support and guidance,

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4. Making sure learning is happening by monitoring the learning process and checking the learning outcomes,
5. Evaluating the achievement through a choice of suitable means to assess processes and products of learning.

Hence, though the teacher's influence is limited, a collaborative learning environment doesn't reduce the role of the teacher. On the contrary, the teacher is meant to keep monitoring the whole process so that the group achieve the expected outcome.

As it can be realised in the roles above, the teacher takes designs the task, the pedagogy, and the technology. In addition, the teacher sets the learning objectives, the expected interaction, and assigns material to the group(s). The teacher decides on the form of feedback to provide (commenting drafts or final version), how the learners can exchange or create ideas and findings, etc.

## **Learners' roles**

Like teachers, learners play important roles in order to achieve a collaborative work. Lund (2008) demonstrates that, learners draw on social resources such as peers, institutional affordances, PCs, and computer applications rather than learning individually (assimilation of vocabulary, grammar, etc). Laurillard (ibid.) states that, students construct a shared output, produce ideas, and elicit feedback. They also promote abstraction, motivate and practice with peers explaining, modelling, etc. During the construction of ideas, Laurillard (2012) suggests that learners are expected to be able to refer to authoritative resources which can help them frame their ideas and solutions. As this is a complex task for the learners, the technology can support them in providing information.

## **Technology support**

Technology can support communication and collaboration between participants. Laurillard (2012) reviews researchers who identify three important properties of digital technology that can encourage social learning. Firstly, computers can make it easier to construct and reconstruct knowledge and ideas. Secondly, they keep a record of activity and product and lastly, they can analyse interaction. The Wiki technology can support a collaborative learning environment. In Moodle, collaboration and interaction can be synchronous or asynchronous (forums, wikis, etc) and through a wide range of instruction materials such texts, videos, audio, etc (Rice & Nash, 2010).

## **Wiki potential**

Research studies have established the nature and value of wikis in a collaborative learning environment ((Dudeney, 2007; Lund, 2008; Rice & Nash, 2010; Laurillard, 2012).

Wiki is a Hawaiian word which means 'fast' (Dudeney, 2007) or 'quick' (Laurillard 2012; Wilber, 2010). It's a collective website that contains text-based content and that allows participants to debate and exchange content (Laurillard, ibid.).

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Many research studies account for a lot of wiki potential. It fulfils the requirements for collaborative learning for different reasons: the shared goal like building the wiki itself and the text-based content that users develop. Its format lends itself to means of constructing ideas which participants want to share with each other in the form of a shared document that can be reviewed any time (Rice & Nash, 2010; Laurillard, 2012). It can be available on the Internet or local server and it provides means to share ideas (Wilber, 2010). Additionally, it is essentially an ideal environment meant for collaboration (Dudney, 2007; Laurillard, *ibid.*). For language learning and development, a wiki has the potential for collective knowledge construction, organising and sustaining multimodal resources like text, visual, audio, video (Wilber, 2010; Rice & Nash, 2010; Laurillard, 2012).

A wiki also holds the potential for learner interdependence in solving complex problems that one individual wouldn't be able to solve (Lund, 2008).

Collaborative writing is a way to foster reflective thinking on grammatical accuracy, lexis and discourse. It also encourages language knowledge pooling and scaffolding (Vygotsky, 1978; Storch, 2005; Rice & Nash, 2010). Learners observe teachers and others and they can modify their behaviours until they conform to the norm (Rice & Nash, 2010).

## **Editing a wiki**

West & West (2009) review research which identifies 'constructive editing', which is about making constructive comments and contributing to peer evaluations' (West & West 2009:52). They maintain that constructive editing can take many forms such as adding, elaborating, and redefining. It is also about organising, citing and providing references, and making formatting consistent, etc.

One of the ways the teacher can control the contributions is to keep monitoring the wiki project. Fortunately, wikis allow users to view the history the wiki (revisions that have been made, when and by whom). Furthermore, the teacher can check how substantial each revision is, the time span between revisions, who is making most or least contributions, etc.

## **Wiki issues**

As discussed above, there is great potential for collaborative writing such as team working, collective output (production of a text).

However, there are a few issues associated with it (Storch 2005; Lund 2008; Kessler 2009; Wilber 2010; Liou & Lee, 2011; Laurillard 2012). According to Storch (*ibid.*), the focus is on the product instead of the writing process and, during the peer review, learners tend to focus on form (errors at the word and sentence level). Storch (*ibid.*) also observes that collaborative writing is limited to the brainstorming stage, right at the beginning of the process, and to the final stage (peer review). In the peer review stage, learners review each other's written text and suggest potential improvements.

There are other issues related to unconstructive editing. It refers to protecting or locking text or pages, deleting passages without comment or reason, adding bias, exerting control or claiming ownership over a page or passage, making changes anonymously, adding

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inaccurate or poorly researched passages. Also, only one student can edit and save changes at a time.

There may be problems associated with constructive editing as some learners hesitate to edit their peers' work to avoid upsetting each other. Kessler (2009) advises that should observe learners during the collaborative tasks and attend to content and form.

There is also an issue of co-authoring in the writing process since it is difficult to monitor (Liou & Lee, *ibid.*).

Laurillard (2012) refers to empirical studies which make it clear that learners have low expectations of collaboration. She reviews studies which show that, just because learners are put in a group, they don't collaborate even when they want to.

Lund (2008) notes, that for teachers, the challenge is to prepare learners for participation in the collaborative practice. Another issue, observes Wilber (2010), is that teachers have been trained to teach traditionally.

In such challenging situations, the teacher's role is to make sure there is a balance of contributions to avoid 'uneven participation, the greatest complaint about collaborative work from instructors and students' (West & West, 2009:53).

## **Assessment strategies**

In order to support the process, West & West (2009) suggest a 'process check', an opportunity for the members of the wiki to assess how things are going (collaboration, process, etc) against the wiki goal so as to make necessary changes to ensure success. Individually, when the wiki is halfway through for instance, the teacher needs to assess each individual wiki member in order to gauge the level of familiarity and engagement with the project. A quiz (short answer) can be imbedded in a virtual learning environment like Moodle. The quiz questionnaire can include such questions as 'what are the objectives of the wiki'. 'What is your role', etc.

In case of conflicts and obstacles, the teacher can use conflict resolution strategies like engaging learners in an open discussion through a chat to offer each learner a chance to voice their concerns. Another strategy that can be used to resolve problems is to ask learners to step back and review the project goals and action plan as set out at the beginning of the project.

## **The result of a wiki**

The wiki can result in an information source, which can be shared with the whole class or institution. It can also result in reflecting on the collaboration experience, what each person has contributed and gained from the experience, etc. Learners can be engaged in a final thread discussion which would address remaining issues and become an opportunity for discussing the outstanding learning moments, skills and knowledge gained, etc and providing advice to future wiki groups.

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## ***Conclusion***

As the world keeps changing around us, teachers need change as well and shift from the traditional ways of teaching (Laurillard, 2012).

If teachers change, then their roles change too. They need to create effective conditions for learners to engage with the collaborative learning environment.

It is important for teachers to help learners through the different writing stages (brainstorming, outlining, elaboration, editing, etc). West & West (2009) also advise that learners need to be helped with the editing process (how and when to edit).



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